

Tender Enquiry No. F.No.24/Eqpt/35/2013-RIS (Admin)

Cost- Rs.1000

**TENDER NOTICE**

VAT- Rs.135

**Equipments for the Department of Transfusion Medicine  
AIIMS, Rishikesh, Virbhadr Marg, Rishikesh, Dehradun**

Total Cost-1135

Date: 7<sup>th</sup> Sep, 2013

On behalf of the Director, All India Institute of Medical Sciences, Rishikesh tenders in sealed cover are invited under **two-bid** system from manufacture and their authorised dealers/ distributors for providing for Equipment for Department of Transfusion Medicine AIIMS Rishikesh.

The interested manufacture and their authorised dealers/ distributors are required to submit the technical and financial bid separately. The bids in Sealed Cover-I containing “Technical Bid” and Sealed Cover-II containing “Financial Bid” should be placed in a third sealed cover super scribed **“Tender For Equipments for Department of Transfusion Medicine”** and should reach at the office of **“The Administrative Officer, AIIMS, Virbhadr Marg Rishikesh (Dehradun) - 249201,** before 03.00 PM on or before **30/09/2013**. The bid received after due date and time will not be entertained whatsoever may be the reason. The technical bids shall be opened on the same day at 03.00 PM at AIIMS, Rishikesh. In the event of any of the above mentioned date being declared as a holiday / closed day, the tenders will be opened on the next working day at the appointed time. The financial bid of technically qualified agencies will be open announced later.

The tender document containing technical bid form, financial bid form, technical description/specification & item and terms & conditions can be purchased from AIIMS, Rishikesh from **09/09/2013 to 29/09/2013** between 10.00 AM and 02.00 PM on non-refundable payment of Rs.1135.00 (Rupees one thousand one hundred thirty five only) or can be downloaded from website [www.aiimsrishikesh.edu.in](http://www.aiimsrishikesh.edu.in). Those who download the tender document from website should enclose DD/Pay Order for Rs.1135.00 (Rupees one thousand one hundred thirty five only) (non-refundable) in favour of **“AIIMS, Rishikesh”**, payable at Rishikesh, not later the date of **29/09/2013** alongwith their technical bid in the Cover-I “Technical Bid”. The bid security (EMD) for **Equipments for Department of Transfusion Medicine** as given in table-1 below tender documents should be paid in the form of FD/BG/TD/CD in favour of **“AIIMS, Rishikesh”** payable at **Rishikesh** and will be placed in cover-1 with technical bid. The Tender Documents are not transferable.

Any future clarification and/or corrigendum(s) shall be communicated through Administrative Officer on the AIIMS, Rishikesh website: [www.aiimsrishikesh.edu.in](http://www.aiimsrishikesh.edu.in).

**Rakesh Kumar**  
Administrative Officer  
AIIMS, Rishikesh

Sign of Bidder

**Tender Enquiry No. F.No.24/Eqpt/35/2013-RIS (Admin)****TENDER DOCUMENT****“Equipments for Department of Transfusion Medicine”****AIIMS, Rishikesh****TECHNICAL BID****(In separate sealed Cover-I super scribed as “Technical Bid”)**

1. Name & Address of the manufacture and their authorised dealers/ distributors/Agency with phone number, email, name and telephone/mobile	
2. Specify your firm/company is a manufactures/ authorised dealer/ distributor/ Agency	
3. Name, Address & designation of the authorized person (Sole proprietor/partner /Director)	
4. Have you previously supplied these items to any government/ reputed private organization? If yes, attach the relevant poof. Please provide a notarised affidavit on Indian Non Judicial stamp paper of Rs. 10/- that you have not quoted the price higher than previously supplied to any government Institute/Organisation/reputed Private Organisation or DGS&D rate in recent past. <b>If you don't fulfil this criteria, your tender will be out rightly rejected.</b>	
5. Please attach copy of last of Income Tax Return	
6. Please attach balance sheet ( <i>duly certified by Chartered Accountant</i> ) for last three (3) years (Annual minimum turnover should not be less than 25 lakhs)	
7. PAN No. (Please attach copy)	
8. VAT/Service Tax Registration Number. (Please attach copy)	
9. Acceptance of terms & conditions attached (Yes/No). Please sign each page of terms and conditions as token of acceptance and submit as part of tender document with technical bid. Otherwise your tender will be rejected.	
10. Power of Attorney/authorization for signing the bid documents	
11. Please submit a notarised affidavit on Indian Non judicial stamp paper of Rs. 10/- that no case is pending with the police against the Proprietor/firm/partner or the Company (Agency). Indicate any convictions in the past against the Company/firm/partner. Please also declare that proprietor/firm has never been black listed by any organization.	
12. Please submit a notarised affidavit on Indian Non Judicial Stamp Paper of Rs.10/- that they will provide complete warranty for all equipments for 2 (two) years & CMC for 5 (five) years of these equipments.	
13. Please furnished a notarised affidavit on Indian Non judicial stamp paper of Rs.10/- that they will supply spare parts for next 10 years at reasonable price.	
14. Details of the FD/BG/TD/CD of bid security (EMD)  FD/BG/TD/CD No:  Date:  Payable at-	Detail of cost of Tender for Rs. 1135/- (if downloaded from website) DD No. Date: Payable at-

**Sign of Bidder**

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**Declaration by the Tenderer:**

This is to certify that I/We before signing this tender have read and fully understood all the terms and conditions contained herein and undertake myself/ourselves to abide by them.

- Encls:** 1. DD/Pay Order (if tender form is downloaded from the website of this Institute)  
2. FD/BG/TD/CD  
3. Terms & Conditions (each page must be signed and sealed)  
4. Financial Bid

**(Signature of Tenderer with seal)**

Name:

Address :

Place:.....

Date:.....

**Tender Sl.No:**

**Sign of issuing Authority**

**Sign of Bidder**

**Tender Enquiry No. F.No.24/Eqpt/35/2013-RIS (Admin)**

**“Equipment for the Department of Transfusion Medicine”  
AIIMS, Rishikesh**

**FINANCIAL BID**

**(In sealed Cover-II super scribed “Financial Bid”)**

To,  
Administrative Officer  
AIIMS Rishikesh, Virbhadr Marg  
Rishikesh (Dehradun)

Dear Sir,

Dear Sir,

Our quoted rate for supplying the Equipment of Department of Transfusion Medicine for AIIMS, Rishikesh will be as follows.

S/No	Name of Equipment	Unit Price ( In Rs.) With 2 years warranty (if applicable)		Unit Price ( In Rs.) CMC for 5 years ( In Rs.) (if applicable)	
		(In figure)	(In words)	(In figure)	(In words)
35(1)	Automatic component preparation machine				
35(2)	Blood collection monitor				
35(3)	Blood bank refrigerator				
35(4)	Coagulation analyser				
35(5)	Cryobath				
35(6)	Deep freezer -40°C				
35(7)	Deep freezer -80°C				
35(8)	Digital centrifuge for column agglutination technique based cards				
35(9)	Donor couch				
35(10)	Hematology analyser				
35(11)	Laboratory autoclave				

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35(12)	Laboratory incubator				
35(13)	Laminar air flow				
35(14)	Plasma thawing bath				
35(15)	Platelet incubator with agitator				
35(16)	Reagent refrigerator				
35(17)	Refrigerated centrifuge				
35(18)	Sterile connecting device				
35(19)	Table top centrifuge with swinging bucket				
35(20)	Tube sealer- hand held				
35(21)	Tube sealer- table top				
35(22)	Transportation box				
35(23)	Recovery bed				
35(24)	Instrument trolley				
35(25)	Tube stripper				
35(26)	Single channel Micropipette (variable volume) 0.5-10µl 5-50 µl 20-200 µl 100-1000 µl				
35(27)	Apheresis machine				
35(28)	Chemiluminescence based fully automated immunoassay				

The unit cost should be mentioned as per table 1. The above quote should include all applicable taxes and F.O.R. AIIMS, Rishikesh. L1 will be decided on the basis of unit cost of individual equipment.

**Declaration by the Bidder:**

1. This is to certify that I/We before signing this tender have read and fully understood all the terms and conditions contained in Tender document regarding terms & condition of the contract, rules regarding purchase of equipments for Department of Transfusion Medicine. I/we agree to abide them.

**Sign of Bidder**

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2. No other charges would be payable by Client and there would be no increase in rates during the Contract period.

**(Signature of Bidder with seal)**

Place:.....

Date:.....

Name:

Seal:

Address

**Tender Sl.No:**

**Sign of issuing Authority**

**Sign of Bidder**

## Tender Enquiry No. F.No.24/Eqpt/35/2013-RIS (Admin)

### “Equipments for Department of Transfusion Medicine” AIIMS, Rishikesh

#### Terms & Conditions

#### (A) Information and Conditions relating to Submission of Bids

1. The tender document containing eligibility criteria, scope of work, terms & conditions and draft agreement can be purchased from AIIMS, Rishikesh on any working day from **09-09-2013 to 29-09-2013** between 10.00 AM to 02.00 PM on payment of non refundable charges of Rs 1135/- (Rupees one thousand one hundred thirty five only) or can be downloaded from website [www.aiimsrishikesh.edu.in](http://www.aiimsrishikesh.edu.in). Those who download the tender document from Website should enclose a Demand Draft/Pay Order for Rs 1135/-(Rupees one thousand one hundred thirty five only) in favour of **“AIIMS, Rishikesh”**, payable at Rishikesh, not later the date of **29-09-2013**, along with their bid in the Cover-I containing “Technical Bid”.
2. The interested firms/suppliers are required to submit the Technical and Financial Bids separately in the format enclosed. The bids in sealed Cover-I containing **“Technical Bid”** and sealed Cover-II containing **“Financial Bid”** should be placed in a third sealed cover super scribed **“Tender for Purchase of equipment for Transfusion Medicine”** should reach AIIMS, Rishikesh by or before 03.00 PM on **30-09-2013**. The Technical bids shall be opened on same day **at 03.00 PM** at AIIMS, Rishikesh in presence of the bidders or their authorized representatives who choose to remain present. The Tender received after due date & time will be rejected and no claim shall be entertained whatsoever may be the reason.
3. The pre bid conference would be held on **17-09-2013 at 03.00 PM** in the office of Dy Director (Administration), AIIMS, Rishikesh. All firms representative who are attending the pre bid meeting, shall produce an authorisation letter from their firm on the firm’s letter head. They are required to put their query in writing before the committee.
4. All the duly filled/completed pages of the tender should be given serial /page number on each page and signed by the owner of the firm or his Authorized signatory. In case the tenders are signed by the Authorized signatory, a copy of the power of attorney/authorization may be enclosed along with tender. A copy of the terms & conditions shall be signed on each page and submitted with the technical bid as token of acceptance of terms & conditions. Tender with unsigned pages/incomplete/partial/part of tender if submitted will be rejected out rightly.
5. All entries in the tender form should be legible and filled clearly. If the space for furnishing information is insufficient, a separate sheet duly signed by the authorized signatory may be attached. No overwriting or cutting is permitted in the Technical Bid as well as Financial Bid unless authenticated by full signature of bidder. Any omission in filling the columns of Financial Bid form (Schedule of Rates) shall debar a tender from being considered. Rates should be filled up carefully by the tenderer. All Corrections in this schedule must be duly attested by full signature of the tenderers. The corrections made by using fluid and overwriting will not be accepted and tender would be rejected.

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6. The bidder shall pay the respective amount of Bid Security (EMD) as mentioned in table-I along with the Technical Bid by Demand FD/BG/TD/CD in favour of "AIIMS, Rishikesh" drawn on any Nationalized Bank/ Scheduled Bank and payable at Rishikesh and must be valid for (6) six month. Bids received without Earnest Money deposit (EMD) shall stand rejected and thus shall not be considered for evaluation etc at any stage. The original EMD will be put in cover-I containing Technical bid.

- a) The Public Sector Undertaking of the Central/State Govt. are exempted from furnishing Earnest Money along with tender.
- b) The firms Registered with DGS & D/SSI and any approved source of Centre/States Govt. are not exempted from furnishing Earnest Money in so far as this institute is concerned.
- c) Earnest Money deposited with AIIMS, Rishikesh in connection with any other tender enquiry even if for same/similar material / Stores by the tenderer will not be considered against this tender.

7. The bid security (EMD) without interest shall be returned to the unsuccessful bidders after finalization of contract.

8. The successful bidders has to constitute a contract on Indian non judicial stamp paper of Rs.100/- (Rupees one hundred only) and also required to furnish the security deposit @ 10% of contract value in the form of FD/BG/TD/CD of any nationalised bank in favour of AIIMS, Rishikesh & payable at Rishikesh only. The EMD deposited by successful bidder may be adjusted towards Security Deposit as demanded above. If the successful bidder fails to furnish the full security deposit or difference amount between Security Deposit and EMD within 15 (fifteen) days after the issue of Letter of Award of Work, his bid security (EMD) shall be forfeited unless time extension has been granted by AIIMS, Rishikesh.

9. The EMD shall be forfeited if successful bidder fails to supply the goods/equipment in stipulated time or fails to comply with any of the terms & conditions of the contract or fail to sign the contract.

10. The bid shall be valid and open for acceptance of the competent authority for a period of 180 (one hundred eighty) days from the date of opening of the tenders and no request for any variation in quoted rates and / withdrawal of tender on any ground by bidders shall be entertained.

11. To assist in the analysis, evaluation and computation of the bids, the Competent Authority, may ask bidders individually for clarification of their bids. The request for clarification and the response shall be in writing but no change in the price or substance of the bid offered shall be permitted.

12. After evaluation, the work shall be awarded normally to the Agency fulfilling all the conditions and who has quoted the lowest rate as per financial bid after complying with the all the Acts / provisions stated / referred to for adherence in the tender.

**Sign of Bidder**



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13. The competent authority of AIIMS, Rishikesh reserved all rights to accept or reject any/ all tender(s) without assigning any reason. It can also impose/relax any term and condition of the tender enquiry after due discussion in pre bid conference. This will be communicated to all tenderers in writing. AIIMS, Rishikesh also reserves the right to reject any bid which in his opinion is non-responsive or violating any of the conditions/specifications without any liability to any loss whatsoever it may cause to the bidder in the process.

14. Tender must be submitted on the prescribed Tender Form otherwise tender will be cancelled straightway.

15. The tender form is not transferable.

16. Canvassing in any form is strictly prohibited and the tenderer who are found canvassing are liable to have their tenders rejected out rightly.

### **(B) OTHER TERMS & CONDITIONS OF THE TENDER**

1. Rates quoted should be inclusive of all applicable taxes, packing, forwarding, postage and transportation charges at FOR AIIMS Rishikesh.

2. All the rates should be mention in Indian national currency (INR) only. The rates quoted in foreign currency will not be entertained in this tender enquiry & such tenders will be cancelled straightway.

3. Rates should be mentioned both in figures and in words. The offer should be typed or written in Ink Pen/ Ball Pen without any correction. Offers in pencil will be cancelled. Telegraphic/ Telex/ Fax offers will not be considered and cancelled straightway.

4. The supplier shall submit a notarised affidavit on Indian Non Judicial Stamp Paper of Rs.10/- that you have not quoted the price higher than previously supplied to any government Institute/Organisation/reputed Private Organisation or DGS&D rate in recent past. Therefore, if at any stage it has been found that the supplier has quoted lower rates than those quoted in this tender, the Institute (the purchaser) would be given the benefit of lower rates by the Supplier. **If such affidavit is not submitted, tender will be out rightly rejected.,**

5. If the price of the contracted articles is/ are controlled by the Government, in no circumstances the payment will be higher than the controlled rate.

6. Tender will be regarded as constituting an offer open to acceptance in whole or in part at the discretion of the competent authority of the institute for a period of 180 days (6 months) valid from the date of opening of the tender by the committee.

**Sign of Bidder**

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7. The time for the date of delivery/ dispatch stipulated in supply order shall be deemed to be essence of the contract and if the supplier fails to deliver or dispatch any consignment within the period prescribed for such delivery or dispatch in the supply order, liquidated damages may be deducted from the bill @ 0.5% per week subject to maximum of 10% of the value of the delayed goods or services under the contract. The competent authority of the institute may also cancel the supply. In such a case, bid security of the supplier shall stand forfeited.

8. In case the quality of goods supplied are not in conformity with the standard given in tender and as per the samples supplied or the supplies are found defective at any stage these goods shall immediately will be taken back by the supplier and will be replaced with the tender quality goods, without any delay. The competent authority reserves all rights to reject the goods if the same are not found in accordance with the required description / specifications and liquidates damages shall be charged.

9. In case the tenderer on whom the supply order has been placed, fails to made supplies within the delivery schedule and the purchaser has to resort risk purchase, the purchaser (AIIMS, Rishikesh) may recover from the tender the difference between the cost calculated on the basis of risk purchase price and that calculated on the basis of rates quoted by tenderer. In case of repeated failure in supplying the order goods the supply order may be cancelled and bid security deposit will be forfeited.

10. The Specification and quantity of the item needed is mentioned in **Table I** but it is approximate detail and is subject to increase/decrease at the discretion of the competent authority of AIIMS, Rishikesh. The payment would be made for actual supply taken and no claim in this regard should be entertained.

11. Where the specifications are as per tenderer's range of product & tenderer's offer should mention that the item meets all specifications as per the tender enquiry and if there are improvements/deviations the same should be brought out on separate Letter Head of the firm. It would be discretion of the competent authority of the institute to accept or reject such deviations which are not in accordance with our required specifications as per given in **Annexure-I.**

12. It must be mentioned clearly whether tenderer is a manufacturer/sole distributor/sole agent for the items for which he is quoting.

- a. **Manufacturer** must add a certificate that item(s) is manufactured by them as per range of products.
- b. **Sole Manufacturers** must add a certificate that they are the sole manufacturer of the Item for which they are quoting in this tender enquiry & item is /are their proprietary Item in India. The rate certificate is also required from the sole manufactures that the Rates quoted are the same as they quote to other State/Centre Govt./reputed Private Organisation and DGS&D rate for the similar item(s) and these are not higher than those quoted by them.

Sign of Bidder

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- c. **Authorized agents** must add authority letter from their Manufacturer/Principals on the letter head of the manufacturer/principals in proforma given in attach duly supported by a notarised affidavit on Indian Non Judicial Stamp Paper of Rs.10/- (Rupees ten only) that they are quoting Rates on behalf of them. The authorization letter must give/mention the purpose for which it is allowed. The validity period of the authorization letter must be mentioned in the authority letter otherwise tender will be liable to rejection.

13. The Tenderers should furnished a copy of **S.T. /C.S.T./VAT registration number**, the **State / U.T. of registration** and the date of such registration. Tenders not complying with this condition will be **rejected**.

14. The tenderers should submit along with the tender, a photo state copy of the last Income Tax return and copy of current valid income tax clearance certificate (IT CC) otherwise tender may be ignored.

15. In case asked, tenderer must personally supply a sample/give the demonstration of the **equipments** to the competent authority of the institute and in that case all the expenses will be borne by the supplier.

16. Full description & specifications, make/brand and name of the manufacturing firm must be clearly mentioned in the tender failing which the tender will not be considered. The tenderer must also mention whether the goods are imported / indigenous. Descriptive literature / catalogues must be attached with the tender in original failing which tender may be ignored.

17. Any failure or omission to carryout of the provisions of this supply by the supplier shall not give rise to any claim by supplier and purchaser one against the other, if such failure or omission arise from an act of God which shall include all acts of natural calamities from civil strikes compliance with any status and or requisitions of the Government lockout and Strikes, riots, embargoes or from any political or other reasons beyond the suppliers control including war (whether declared or not) civil war or state of incarceration provided that notice of the occurrence of any event by either party to the other shall be within two weeks from the date of occurrence of such an event which could be attributed to force majeure.

18. The Courts at Rishikesh/ Dehradun alone and no other Court will have the jurisdiction to try the matter, dispute or reference between the parties arising out of this tender/supply Order/contract.

19. Tenderer will have to provide complete warranty for all equipments for 2 (two) years & CMC for 5 (five) years of these equipments. Financial bid should be quoted accordingly. In this regard, the tenderer shall submit a notarised affidavit on Indian Non Judicial Stamp Paper of Rs.10/- that they will provide complete warranty for all equipments for 2 (two) years & CMC for 5 (five) years of these equipments.

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20. If at any time, any question, dispute or difference whatever shall arise between supplier and the institute (Purchaser) upon or in relation to or in connection with the agreement, either of the parties may give to the other notice in writing of the existence of such a question, dispute or difference and the same shall be referred to two arbitrators one to be nominated by the institute (Purchaser) and the other to be nominated by the supplier. Such a notice of the existence of any question dispute or difference in connection with the agreement shall be served by either party within 60 days of the beginning of such dispute failing which all Right sand claims under this Agreement shall be deemed to have been forfeited and absolutely barred. Before proceeding with the reference the arbitrators shall appoint/nominate an umpire. In the event of the arbitrators not agreeing in their award the Umpire Appointed by them shall enter upon the reference and his award shall be binding on the Parties. The venue of the arbitration shall be at Rishikesh, (Uttarakhand, India). The arbitrators/Umpire shall give reasoned award.

21. Tenderer should ensure and give an affidavit on Indian Non Judicial stamp paper of Rs.10/- with technical bid that spare parts and consumables for these equipments/instruments will be available and rates will be reasonable for next 10 (ten) years.

I / We hereby accept the terms and Conditions given in the tender

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(Signature & Stamp of the bidder)

*Note- Please sign each page of document including terms & conditions & tender*

**Sign of Bidder**

**Tender Enquiry No. F.No.24/Eqpt/35/2013-RIS (Admin****Table-I****Details of items & their tentative quantity and EMD**

The following items manufactured by international firms of repute with CE or FDA approval are required.

<b>S.No.</b>	<b>Item</b>	<b>Quantity</b>	<b>EMD</b>
35(1)	Automatic component preparation machine	01	78000/-
35(2)	Blood collection monitor	04	30000/-
35(3)	Blood bank refrigerator	02	36000/-
35(4)	Coagulation analyser	01	17000/-
35(5)	Cryobath	01	7000/-
35(6)	Deep freezer -40°C	02	36000/-
35(7)	Deep freezer -80°C	01	30000/-
35(8)	Digital centrifuge for column agglutination technique based cards	01	13000/-
35(9)	Donor couch	05	30000/-
35(10)	Hematology analyser	01	21000/-
35(11)	Laboratory autoclave	01	5000/-
35(12)	Laboratory incubator	02	9000/-
35(13)	Laminar air flow	01	6000/-
35(14)	Plasma thawing bath	01	7000/-
35(15)	Platelet incubator with agitator	02	36000/-
35(16)	Reagent refrigerator	02	17000/-
35(17)	Refrigerated centrifuge	01	78000/-
35(18)	Sterile connecting device	01	36000/-
35(19)	Table top centrifuge with swinging bucket	02	36000/-
35(20)	Tube sealer- hand held	02	13000/-

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35(21)	Tube sealer- table top	04	30000/-
35(22)	Transportation box	02	11000/-
35(23)	Recovery bed	01	5000/-
35(24)	Instrument trolley	08	5800/-
35(25)	Tube stripper	08	5800/-
35(26)	Single channel Micropipette (variable volume) 0.5-10µl 5-50 µl 20-200 µl 100-1000 µl	02 08 02 02	5480/-
35(27)	Apheresis machine	01	91000/-
35(28)	Chemiluminescence based fully automated immunoassay	01	101000/-

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**Tender Enquiry No. F.No.24/Eqpt/35/2013-RIS (Admin****Annexure-I****Specification Item Srl No. 35(1)****Automatic Component Preparation Machine**

1.	The equipment should work with a vertical parallel pressure plates that is pneumatically driven
2.	The equipment must be compatible with any brand of blood bags meeting international standard (WHO / ISI 3826)
3.	The equipment must separate component from the blood collected in double, triple, quadruple with or without additive solution (SAGM/ ADSOL)
4.	Equipment should have facility to use both kinds of bags. Top and Top & Top and Bottom.
5.	Microprocessor controlled through regulator with mechanism to reduce layer disturbance.
6.	It should have ten programs for preparation of components from blood collected in different types of bags.
7.	The press system should apply uniform pressure on the blood bag ensuring minimum layer disturbance for efficient separation. The press system should safeguard the operator from injury.
8.	The equipment should have an integrated system of at least 5 sealing heads with automatic and manual mode facility.
9.	It should give at least up to one log leucoreduction for red cell and platelets.
10.	It should have optical sensors seven or more than seven to automatically control the flow of various blood components (Plasma, Platelets and red cells) in satellite tubing.
11.	It should have minimum 3 scales with auto calibration facility to measure the weight of various components separated (Plasma, Red cell and Platelets).
12.	The equipment should have control panel with LED/LCD display system to indicate various procedural step.
13.	Must show audio/visual alarm when Tube is not fixed at sealer as per type of bags (Double, triple, Quadruple).
14.	The tube sealing should be radio frequency type.
15.	The equipment should have built in audio/visual alarm system to indicate the completion of the procedure.
16.	The equipment should have the provision to store and transfer the blood component details including the identification number of the donor unit to a central computer, through local area network.
17.	Equipment must have facility to interface with the blood bank management software.
18.	List of installation should be attached with performance certificate of the customer.
19.	Compatible UPS, to complete the ongoing procedure, with a back-up supply for at least half an hour, should be supplied with the equipment.
20.	The equipment should be US-FDA or CE or equivalent authority approved.
21.	Atleast 2 year warranty period with 5 years CMC after expiry of warranty period. Free of cost annual calibration in the warranty period
22.	The unit shall be capable of operating continuously in ambient temperature of 10 degree to 40 degree C and relative humidity of 15-90 percentage
23.	The unit shall be capable of being stored continuously in ambient temperature of 0-40 deg C and relative humidity of 15-90percentage

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24.	Shall meet IEC-60601-1-2:2001 (Or Equivalent BSI) General Requirements of Safety for Electromagnetic Compatibility.
25.	Power input: 220-240 V/50 Hz AC Single phase, fitted with Indian plugs and sockets.
26.	Voltage corrector/stabilizer of appropriate ratings meeting ISI Specifications. (Input : 160-260 V and output 220-240 V and 50 Hz)



**Tender Enquiry No. F.No.24/Eqpt/35/2013-RIS (Admin****SPECIFICATION Item Srl No. 35(2)****Blood collection monitor**

1.	Weighing range 50-500 ml
2.	Automatic tare to zero for the empty bag weight
3.	Adjustable low and high flow alarms
4.	Adjustable donation time out up to 20 minutes
5.	Adjustable default volume
6.	Automatic clamp of tubing at the end of the donation
7.	Weighing accuracy $\pm 2\%$
8.	Power supply 115/230 VAC; 50/60 Hz
9.	Power consumption Max 12 VA
10.	Automatic release of bag when lifted
11.	LED indication on commencement of collection and indication with alarm at the end of collection
12.	Indication of time taken for collection
13.	Indication with alarm if blood flow rate is high or low
14.	Continuous display of collected volume, flow and time during collection
15.	Automatic clamping at termination of preset volume collection
16.	Continuous agitation of bag during collection: 12-16 RPM
17.	Easy provision to change reset volume
18.	Should operate on mains as well as rechargeable battery. On battery it should operate for a minimum of 5-8 hrs and should be able to collect at least 60 collections.
19.	Pause facility to pause during collection
20.	Should be suitable for all types of bags.
21.	Should have detachable Tray and metallic body.
22.	Should comply ISO 9001:2008 & ISO 13485:2012
21.	At least 2 year warranty period with 5 years CMC after expiry of warranty period. Free of cost annual calibration in the warranty period.
24.	List of installation and feedback report should be provided.

**Tender Enquiry No. F.No.24/Eqpt/35/2013-RIS (Admin****SPECIFICATION Item Srl No. 35(3)****Blood Bank Refrigerator**

<b>1.</b>	<b>Purpose of Equipment</b> (i) A refrigerator for storing whole blood or red cell packs in a blood bank. (ii) Must be designed specifically for blood bank use. Commercial or modified commercial refrigerators for other purpose are not acceptable.
<b>2.</b>	<b>Type of Equipment:</b> Approved standard electrical Blood bank refrigerator that uses a compressor circulating CFC-free refrigerant.
<b>3.</b>	<b>Quality Standards</b> (i) Manufacturing should be compliant with ISO 13485, and both manufacturer and distributor/service provider should be ISO 9001:2008 compliant. (ii) Should be compliant with CE Class IIA or US FDA. (iii) Equipment must meet electrical safety specifications of IEC 61010-1.
<b>4.</b>	<b>Capacity:</b> At least 300 standard 450ml blood bags.
<b>5.</b>	<b>Construction</b> (i) Outside Corrosion Resistant Sheet at least 1 mm thick (ii) Inside stainless steel of at least 22 G. (iii) Insulation >80 mm thick, foaming agent CFC free
<b>6.</b>	<b>Drawers</b> (i) Stainless steel, scratch resistant at least 22G (ii) Roll out type. (iii) At least four or more in number
<b>7.</b>	<b>Door</b> (i) Glass door with full visibility of units without opening door (ii) Automatic/Magnetic closing at angle upto 90°. (iii) Opening angle limited to <110° (iv) Door opening audio and visual alarm (v) Door lock should be available.
<b>8.</b>	<b>Electrical characteristics</b> (i) Compatible with Input voltage: 240V 50 Hz Single phase AC (ii) Should have an integrated voltage stabilizer or external stabilizer of appropriate ratings meeting ISI Specifications (Input 160-260 V and output 220-240 V and 50 Hz). (iii) Minimum compressor starting voltage should be 22% below normal voltage. (iv) At room temperature of 25°C should be able to maintain at ideal compressor running time of 27%.
<b>9.</b>	<b>Internal Temperature</b> (i) Blood Bank Refrigerator should have inside temperature range of 2°C - 6°C (ii) User parameter settings: Set point, High alarm point, low alarm point, buzzer off time, C/F unit display choice. (iii) Whatever the load, setting accuracy less than or equal to 0.5°C. (iv) Should ensure frost free performance thereby avoiding either freezing or heating. If defrosting function used, temperature should not go outside range specified above.
<b>10.</b>	<b>External Ambient Temperature:</b> Can perfectly maintain internal temperature as above at full load in an ambient temperature of +10 to at least +40 °C
<b>11.</b>	<b>Hold-Over Time:</b> A full load of blood packs at +4 °C (±1 °C) should take more than 1.5 hours to rise to above +6 °C if power off

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<b>12.</b>	<b>Cooling Down Time:</b> A full load of blood packs at +25 °C should not take more than 10 hrs for all the packs to reach below +6 °C
<b>13.</b>	<b>Temperature monitoring, thermograph and related alarms</b> <ul style="list-style-type: none"> <li>(i) Should have temperature sensor.</li> <li>(ii) Microprocessor controlled primary temperature control with user defined parameters</li> <li>(iii) Independent safety thermostat to strictly avoid negative temperature.</li> <li>(iv) Digital temperature (LED) display with 0.1 °C graduation.</li> <li>(v) Integrated Visual AND Audible Temperature alarm systems,</li> <li>(vi) Provision to be connected to a remote monitoring system and remote alarm.</li> <li>(vii) The temperature record should be electronically logged (that can be retrieved eg by USB port) and also documented on a physical thermograph. Preferably with a 7-day, ink-less, pressure-sensitive circular chart recorder.</li> <li>(viii) Must have Battery back up for temperature recordings, which is especially needed during power failure/fluctuations.</li> <li>(ix) Additional Battery back up for alarm so that alarm will not fail in case of power failure, and should be able to sustain the alarm.</li> </ul>
<b>14.</b>	<b>Air circulation</b> <ul style="list-style-type: none"> <li>(i) The temperature inside should be kept uniform in all shelves by Forced air circulation through fans.</li> <li>(ii) The fans shut off when door is opened</li> </ul>
<b>15.</b>	<b>Lighting</b> <ul style="list-style-type: none"> <li>(i) All shelves should have sufficient illumination so that labels on units can be easily read.</li> <li>(ii) Should have light bulbs/tubes that can be changed without removing the drawers.</li> </ul>

Additional requirements:

- a. All equipment should specify qualifications for design, installation, operation and performance.
- b. Validation and calibration reports should have traceability to applicable national and international standards
- c. Complete with comprehensive set of spare parts and a suitable capacity voltage stabilizer for equipment should be supplied with the system.
- d. Warranty for 3 years from the date of installation and CMC for Seven years with spare parts availability. 4-6 visits of service engineer/ representative in warranty period. Free of cost annual calibration in the warranty period.
- e. The make, rating, model, description, specifications of each item should be furnished separately.
- f. Necessary catalogues, technical write up in English, should be attached with the offer both in hard and electronic copies.
- g. Should provide list of installations and feedback report. Performance, efficiency, other factors as applicable should be furnished.
- h. Should provide electronic and hard copies of User Manual (English), Service manual (English) and Complete construction details with respect to material specification, thickness, finish etc.
- i. Should provide a set of equipments for calibration (eg thermometer) and routine Preventive Maintenance as per manufacturer documentation in service/technical manual.
- j. Should provide Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out.

**Tender Enquiry No. F.No.24/Eqpt/35/2013-RIS (Admin)****SPECIFICATION Item Srl No. 35(4)****Coagulation analyser**

1.	Semi Automated Coagulation Analyser with built in printer.
2.	Applicable programme for all clotting assays, i.e PT, APTT, Fibrinogen, TT, extrinsic factors, intrinsic factors, PC, PS, Heparin, LA.
3.	With microprocessor based controlled systems.
4.	At least two-reagent position at 37° C.
5.	Testing volume should be less than 250 µl in cuvettes.
6.	LCD display of results
7.	Built in analyzer to give results in sec /INR / % etc.
8.	Provide with UPS back up for equipment.
9.	Should comply with CE marking, UL marking and IEC standards.
10.	2 years warranty period with 5 years CMC after expiry of warranty period. Free of cost annual calibration in the warranty period.

**Tender Enquiry No. F.No.24/Eqpt/35/2013-RIS (Admin)****SPECIFICATION Item Srl No. 35(5)****Cryobath**

1.	Factory set operating temperature 3.8 °C to 4.2 °C for thawing of plasma bags intended for preparation of cryoprecipitate.
2.	Capacity: at least 12 regular plasma filled bags
3.	Time taken for one process: 2 hours for plasma bags stored at -40 °C
4.	External Voltage stabilizer: 2KVA
5.	Mechanism – pumping mechanism by high capacity pump
6.	Made of stainless steel sheet.
7.	PT100 sensor
8.	Total weight should not exceed 60 kg
9.	Should have two lockable castor wheels
10.	Display resolution 0.1°C
11.	At least two years warranty period with 5 years CMC after expiry of warranty. Free of cost annual calibration in the warranty period.
12.	Manufacturing standards - ISO 9001:2008 & ISO 13485:2012
13.	Should CE certified
14.	List of installation and feedback report should be provided.

**Tender Enquiry No. F.No.24/Eqpt/35/2013-RIS (Admin)****SPECIFICATION Item Srl No. 35(6)****Blood Bank Plasma Freezer, -40°C**

<b>1</b>	<b>Purpose of Equipment</b> (i) To Freeze or store Plasma. (ii) Must be designed specifically for blood bank use. Commercial or modified commercial freezers for other purpose are not acceptable.
<b>2</b>	<b>Type of Equipment</b> (i) Approved standard electrical Blood Bank plasma freezer that uses a compressor circulating CFC-free refrigerant. (ii) Upright type
<b>3</b>	<b>Quality Standard</b> (i) Manufacturing should be compliant with ISO 13485, and both manufacturer and distributor/service provider should be ISO 9001:2008 compliant. (ii) Should be compliant with CE Class IIA or US FDA (iii) Equipment must meet electrical safety specifications of IEC 61010-1
<b>4</b>	<b>Capacity:</b> At least 300 standard plasma bags (more than 450 liters).
<b>5</b>	<b>Construction</b> (i) Outside Corrosion Resistant Sheet at least 1 mm thick (ii) Inside stainless steel of at least 22 G. (iii) Insulation polyurethane foam >80mm thick, foaming agent CFC free (iv) Option to connect to heat exhaust duct. (v) Double Outer Door with standard independent locking to prevent cold air from escaping (vi) Should be mounted on lockable caster wheels
<b>6</b>	<b>Drawers:</b> At least four or more in number in both upper and lower chambers.
<b>7</b>	<b>Door</b> (i) Automatic/Magnetic closing at angle upto 90° (ii) Separate inner doors to prevent cold loss (iii) Heating device in front to avoid condensation (iv) Opening angle limited (eg <110°) (v) Door open/ajar audio and visual alarm (vi) Door lock should be available
<b>8</b>	<b>Electrical characteristics</b> (i) Compatible with Input 240V 50 Hz Single phase AC (ii) Should have an integrated voltage stabilizer or external stabilizer of appropriate ratings meeting ISI Specifications (Input 160-260 V and output 220-240 V and 50 Hz)..
<b>9</b>	<b>Internal Temperature</b> (i) Should be able to maintain internal temperature below minus 40°C (ii) Whatever the load, setting accuracy less than or equal to 1°C.
<b>10</b>	<b>External Ambient Temperature:</b> Can perfectly maintain internal temperature as above at full load in an ambient temperature of +10 to at least +40 °C
<b>11</b>	<b>Hold-Over Time</b> (i) A full load of plasma packs at -36 °C takes at least 1 hr to rise to above

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	<p>-20 °C</p> <p>(ii) A full load of plasma packs at -36 °C takes at least 32 hrs to rise to above -5 °C</p>
<b>12</b>	<p><b>Cooling Down Time</b></p> <p>(i) A full load of plasma packs at +25°C takes a maximum of 5 hrs for all the packs to reach below -5 °C</p> <p>(ii) A full load of plasma packs at +25 °C takes a maximum of 30 hrs for all the packs to reach below -20 °C</p>
<b>13</b>	<p><b>Temperature monitoring, thermograph and related alarms</b></p> <p>(i) Digital temperature (LED) display with 0.1 °C graduation.</p> <p>(ii) Microprocessor controlled primary temperature control</p> <p>(iii) Integrated Visual AND Audible Temperature alarm systems,</p> <p>(iv) There should be a method to test the alarm system</p> <p>(v) Alarm history: temperature maximum and minimum, average temperature during alarm period, time of duration of alarm</p> <p>(vi) Provision to be connected to a remote monitoring system and remote alarm.</p> <p>(vii) The temperature record should be electronically logged (that can be retrieved e.g. by USB port) and also documented on a physical thermograph; preferably with a 7-day graphic chart recorder with supply of free charts for full period of warranty.</p> <p>(viii) Must have Battery back up for temperature recordings which is especially needed during power failure/fluctuations.</p> <p><b>(ix)</b> Additional Battery back up for alarm so that alarm will not fail in case of power failure, and should be able to sustain the alarm.</p>
<b>14</b>	<p><b>Desirable</b></p> <p>(i) Noise factor should not exceed 60 db</p> <p>(ii) At room temperature of 25°C should be able to maintain at ideal compressor running time of &lt;60-70%.</p>

Additional requirements:

- a. All equipment should specify qualifications for design, installation, operation and performance.
- b. Validation and calibration reports should have traceability to applicable national and international standards
- c. Complete with comprehensive set of spare parts and a suitable capacity voltage stabilizer should be supplied with the system.
- d. Warranty for 3 years and CMC for Seven years with spare parts availability.
- e. The make, rating, model, description, specifications should be furnished separately.
- f. Necessary catalogues, technical write up in English, should be attached with the offer both in hard and electronic copies.
- g. Should provide list of installations and feedback report. Performance, efficiency, other factors as applicable should be furnished.
- h. Should provide electronic and hard copies of User Manual (English), Service manual (English) and Complete construction details with respect to material specification, thickness, finish etc.
- i. Should provide a set of equipments for calibration (e.g. thermometer) and routine Preventive Maintenance as per manufacturer documentation in service/technical manual. Free of cost annual calibration in the warranty period.
- j. Should provide Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out.

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**Tender Enquiry No. F.No.24/Eqpt/35/2013-RIS (Admin)****SPECIFICATION Item Srl No. 35(7)****Blood Bank Plasma Freezer, -80°C**

<b>1</b>	<b>Purpose of Equipment</b> (i) To Freeze or store Plasma. (ii) Must be designed specifically for blood bank use. Commercial or modified commercial freezers for other purpose are not acceptable.
<b>2</b>	<b>Type of Equipment</b> (i) Approved standard electrical Blood Bank plasma freezer that uses a compressor circulating CFC-free refrigerant. (ii) Chest type/ Vertical Model. (iii) Fitted with Shelves for efficient stocking. If chest type, it should be provided with steel racks.
<b>3</b>	<b>Quality Standard</b> (i) Manufacturing should be compliant with ISO 13485, and both manufacturer and distributor/service provider should be ISO 9001:2008 compliant. (ii) Should be compliant with CE Class IIA or US FDA (iii) Equipment must meet electrical safety specifications of IEC 61010-1
<b>4</b>	<b>Capacity:</b> More than 400 liters.
<b>5</b>	<b>Construction</b> (i) Interior made of Stainless Steel and Exterior made of Coated Steel (ii) Insulation polyurethane foam >80mm thick, foaming agent CFC free (iii) Option to connect to heat exhaust duct. (iv) Removable, self cleanable Air Filter to remove dust and dirt
<b>6</b>	<b>Door</b> (i) Drop down lockable door with compensating support hinges. (ii) Opening angle limited. (iii) Door lock should be available
<b>7</b>	<b>Electrical characteristics</b> (i) Compatible with Input 240V 50 Hz Single phase AC (ii) Should have an integrated voltage stabilizer or external servo stabilizer of appropriate ratings meeting ISI Specifications (Input 160-260 V and output 220-240 V and 50 Hz). (iii) Minimum compressor starting voltage should be 22% below normal voltage
<b>8</b>	<b>Internal Temperature</b> Able to maintain the Temp. Range of -75 to -85 deg C.
<b>9</b>	<b>External Ambient Temperature</b> Can perfectly maintain internal temperature as above at full load in an ambient temperature of +10 to at least +40 °C



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<b>10</b>	<b>Temperature monitoring, thermograph and related alarms</b> (i) Digital temperature (LED) display with 0.1 °C graduation. (ii) Microprocessor controlled primary temperature control. (iii) All operating Function are on control panel with digital display (iv) Integrated Visual and Audible Temperature alarm systems, (v) There should be a method to test the alarm system (vi) Alarm history: temperature maximum and minimum, average temperature during alarm period, time of duration of alarm (vii) Provision to be connected to a remote monitoring system and remote alarm. (viii) The temperature record should be electronically logged (that can be retrieved e.g. by USB port) and also documented on a physical thermograph; preferably with a 7-day graphic chart recorder with supply of free charts for full period of warranty. (ix) Must have Battery back up for temperature recordings which is especially needed during power failure/fluctuations (x) Additional Battery back up for alarm so that alarm will not fail in case of power failure, and should be able to sustain the alarm.
<b>11</b>	<b>Desirable Features</b> (i) Noise factor should not exceed 60 db (ii) At room temperature of 25°C should be able to maintain at ideal compressor running time of <60-70%.

**Additional requirements:**

- a. All equipment should specify qualifications for design, installation, operation and performance.
- b. Validation and calibration reports should have traceability to applicable national and international standards
- c. Complete with comprehensive set of spare parts and a suitable capacity voltage stabilizer for equipment should be supplied with the system.
- d. Warranty for 3 years and CMC for Seven years with spare parts availability.
- e. The make, rating, model, description, specifications of each item should be furnished separately.
- f. Necessary catalogues, technical write up in English, should be attached with the offer both in hard and electronic copies.
- g. Should provide list of installations and feedback report. Performance, efficiency, other factors as applicable should be furnished.
- h. Should provide electronic and hard copies of User Manual (English), Service manual (English) and Complete construction details with respect to material specification, thickness, finish etc.
- i. Should provide a set of equipments for calibration (e.g. thermometer) and routine Preventive Maintenance as per manufacturer documentation in service/technical manual. Free of cost annual calibration in the warranty period.
- j. Should provide Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out.

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**Tender Enquiry No. F.No.24/Eqpt/35/2013-RIS (Admin)****SPECIFICATION Item Srl No. 35(8)****Digital centrifuge for Column agglutination technique based cards**

1.	It should have 6-12 slots to centrifuge any combination of "Column agglutination Technology" based cards.
2.	The centrifuge should have a Plexi Glass Cover head for transparent viewing.
3.	Monitored by microprocessor
4.	Rpm, time & functions displayed (LCD) in English
5.	Prefixed centrifugation time for pulling only RBCs and attached antibodies through the column.
6.	Programmable audible alarms for end of centrifugal time periods.
7.	Electrical requirement: 240V/50Hz- 60Hz
8.	Should be in EC conformity EN 61010-1
9.	At least two years warranty period with 5 years CMC after expiry of warranty

**Tender Enquiry No. F.No.24/Eqpt/35/2013-RIS (Admin)****SPECIFICATION Item Srl No. 35(9)****Donor couch**

1.	Description: Blood Donor Couch is a completely automatic, variable tilt couch that can be adjusted to body contours and desired alignments specially designated for comfortable, safe and efficient blood withdrawals from blood donors or therapeutic phlebotomy or Apheresis patients.
2.	Operational requirements: <ul style="list-style-type: none"> <li>(i) Variable positioning for either arm with comfortably wide armrests</li> <li>(ii) Armrests to have swinging out as well as up and down moving facility</li> <li>(iii) If a vasovagal attack occurs the donor's head needs to be lowered urgently and his legs lifted above his heart level so that blood can flow back to the brain and other vital organs. Electronic remote controlled facility should be provided for doing this function smoothly.</li> </ul>
3.	Technical Specifications <ul style="list-style-type: none"> <li>(i) Comfortable chair type with soft padding for cushioning and Rexene cover.</li> <li>(ii) Seat, back rest and leg rest size designed for donor comfort.</li> <li>(iii) Seat height approximately 58 – 60 cm.</li> <li>(iv) Easily tilted to head low position, electrically operated.</li> <li>(v) Comfortable working level for the operator. Lifting capacity: Approx 150 kg.</li> <li>(vi) Four Lockable castors for easy mobility</li> <li>(vii) UP/DOWN control</li> <li>(viii) Preferable to have inbuilt trays &amp; stands for keeping all blood collection accessories.</li> <li>(ix) Should be Equipped with a I.V. infusion stand and a holder for BP apparatus</li> </ul>
4.	Environmental factors <ul style="list-style-type: none"> <li>(i) The unit shall be capable of operating continuously in ambient temperature of 10 – 40 °C and relative humidity of 15-90%</li> <li>(ii) The unit shall be capable of being stored continuously in ambient temperature of 0 -40 °C and relative humidity of 15-90%</li> <li>(iii) Shall meet IEC-60601-1-2: 2001 (Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility</li> </ul>
5.	Power Supply <ul style="list-style-type: none"> <li>• Power input: 220-240V/ 50 Hz AC Single phase or 380-400V AC 50 Hz Three phase fitted with appropriate Indian plugs and sockets.</li> </ul>
6.	Standards and Safety <ul style="list-style-type: none"> <li>(i) Should be FDA or CE approved product</li> <li>(ii) Electrical safety conforms to standards for electrical safety IEC-60601 / IS-13450</li> <li>(iii) Manufacturer should have ISO certification for quality standards.</li> <li>(iv) All electrical actuators and mechanisms should be housed inside the structure making the product safer</li> </ul>
7.	Performance, efficiency, other factors as applicable should be furnished. Should provide list of installations and feedback report.
8.	Should provide Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out.
9.	Warranty for 3 years and CMC for Seven years with spare parts availability.

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**Tender Enquiry No. F.No.24/Eqpt/35/2013-RIS (Admin)****SPECIFICATION Item Srl No. 35(10)****Hematology analyser**

1.	It should be twenty parameter and three part differential fully automated blood cell counter.
2.	Should have both whole blood and prediluted mode.
3.	The parameter given should be WBC, LYM%, MIX%, NEUT%, LYM#, NEUT#, RBC, HGB, HCT, MCV, MCH, MCHC, RDW, PLT, PDW, MPV, P-LCR, PCT and Three histograms for RBC, WBC & PLT.
4.	Throughput of 60 samples per hour.
5.	Should be capable to differentiate between Lymphocyte, MIX population & Neutrophils.
6.	It should have electrical resistance method for WBC , PLT, RBC, Cyanide-free Hemoglobin measurement and cumulative pulse height detection method for HCT.
7.	It should have inbuilt help menu, thermal printer and facility to interface with computer.
8.	It should have Auto Probe wiping facility for operator safety.
9.	Instrument should have control information such as lot number, expiry date and assay values can be easily input by scanning the assay sheet using a barcode reader.
10.	It should have Automatic startup, Rinsing & background count check facility.
11.	Instrument should have alarm to alert operator when reagents are empty or when waste container is full.
12.	It should have single lyser for Hb, WBC, RBC and a single diluent for dilution and cleaning.
13.	User friendly software and interface option.
14.	Storage of 1000 sample data.
15.	Provide with UPS back up for equipment
16.	The company supplying the instrument should have a good track record and excellent service and distributor network all over India & Engineer should be locally based. Free of cost annual calibration in the warranty period.
17.	2 years warranty period with 5 years CMC after expiry of warranty period.

**Tender Enquiry No. F.No.24/Eqpt/35/2013-RIS (Admin)****SPECIFICATION Item Srl No. 35(11)****Laboratory Autoclave**

1.	Vertical type. Inner chamber and lid made of stainless steel.
2.	Radial locking system.
3.	Pressure gauge thermometer safety valve, release valve, Water level indicator, stainless steel basket, water outlet, mains indicating lamp, paddle lifting device. Automatic low water cut-off device.
8.	Capacity 50-80 liters.
9.	Pressure Gauge Range : 1 to 1.5 kg/sq. cm
10.	Safety Valve releasing Pressure : 200kPa
11.	Temperature control and display Up to 140°C – adjustable in steps of 1°C, digital type thermometer with timer.
12.	Sterilization Temperature : 105°C to 135°C
13.	Sterilization Timer Setting Range: 1 to 180 min.
14.	Automatic Sterilization of at a touch of the Start button
15.	Audible and Visible alarms for end of cycle and error condition
16.	Power Supply 230±10 Volts. 50 HZ. Single phase
17.	Installation & commissioning will be the responsibility of the supplier
18.	Surface Complete Made of stainless steel.
19.	STANDARD: Instrument must be accompanied with calibration certificate by NABL-accredited agency
20.	All users list for the quoted item with contact number should be provided
21.	At least two years warranty period with 5 years CMC after expiry of warranty

**Tender Enquiry No. F.No.24/Eqpt/35/2013-RIS (Admin)****SPECIFICATION Item Srl No. 35(12)****Laboratory incubator**

1.	Double wall constructed, inner chamber made of stainless steel and exterior made of galvanized sheets, powder coated.
2.	The gap between the two walls should be filled with glass wool insulation. Metallic door with magnetic gasket. Inner cabinet with wire mesh shelves.
3.	Heating elements made of quality Nichrome wire.
4.	Temperature control ranging from 5° C above ambient to 80° C. Resolution 0.1° C. Accuracy $\pm 0.5^{\circ}$ C.
5.	Chamber size of at least 18 x 18 x 24 inches. Chamber made of high-quality, corrosion-resistant and easily cleanable stainless steel for the working chamber and housing.
6.	Precise and homogenous temperature control independent of chamber volume and load.
7.	Forced filter air circulation.
8.	No. of shelves: 2-3.
9.	Timer: 1 minute to 99 hours.
10.	Over temperature protection.
11.	Chamber volume: more than 150 litres.
12.	Electronic digital display of temperature with controller.
13.	Should have ISO 9001:2008 and CE certification.
13.	2 years warranty period with 5 years CMC after expiry of warranty period. Free of cost annual calibration in the warranty period

**Tender Enquiry No. F.No.24/Eqpt/35/2013-RIS (Admin)****SPECIFICATION Item Srl No. 35(13)****Laminar Air Flow (Bio-safety cabinet)**

1.	Features	Floor model, Horizontal flow, well-lighted, work surface, low vibration and noise, easy to maneuver due to castor wheel provision. Over all dimension of work space of approximately 1200 mm x 600 mm x 600 mm
2.	Cabinet	Stainless steel sheet of 20 SWG lining
3.	Front panels	Removable transparent scratch resistance sheet of approximately 6mm thickness
4.	Side panels	Fixed transparent scratch resistance sheet of approximately 6 mm Thickness
5.	Work table	Stainless Steel of 20 SWG lining
6.	Pre-filters	Filtration efficiency of 98% for all types of particles of sizes 8 micron and larger.
7.	Hepafilters (fine-filters)	Filtration efficiency 99.9% for all types of particles of sizes 0.3 micron and larger. Housed in a frame with leak proof gaskets. Air cleanliness in working area to meet U S federal standards.
8.	Motor blower	Dynamically balanced and specially constructed to suit low noise and vibration with adjustable speed. Motor shall conform to ISS or any international specifications
9.	Air velocity	Should not be more than 100 fpm over the work area
10.	Lighting	Fluorescent tube lights with diffuser acrylic to get 120 decalux on work surface
11.	Ultra Violet light source	Shall be provided.
12.	Power Supply	220/240 volts, 50 cycles, single phase. Installation, commissioning and trial run will be the responsibility of the supplier
13.	Line Voltage Corrector	Copper wound single phase automatic line voltage corrector conforming to ISO:9815/89 with latest amendment fitted with a voltmeter and switch to indicate output/input voltage
14.	Technical Literature	The firm shall positively submit printed illustrated technical literature/leaflet including the model quoted by them. If quoted model is modified version of their any standard model that also be indicated in the offer
15.	Warranty	Atleast 2 year warranty period with 5 years CMC after expiry of warranty period

**Tender Enquiry No. F.No.24/Eqpt/35/2013-RIS (Admin)**

**SPECIFICATION Item Srl No. 35(14)**

**Plasma thawing bath**

1.	Should have the basket assembly which can be raised and lowered for convenient access to FFP
2.	Microprocessor based PID control
3.	Should have precise chamber temperature control
4.	Should have a chamber drain system
5.	Should be able to thaw at least 4 plasma bags (FFP/Apheresis)
6.	Should be a water bath based operating at a preset and precise temperature of 37°C
7.	Should have audio visual over-temperature alarm
8.	Should have a deep thawing chamber with a stirrer
9.	Should be supplied with a cover to keep unit covered when not in use.
10.	List of installations and feedback report should be provided
11.	Input power supply 230±10%VAC, 15A single phase.
12.	Should CE or US FDA certified
13.	At least two years warranty period with 5 years CMC after expiry of warranty. Free of cost annual calibration in the warranty period.
14.	Manufacturing standards - ISO 9001:2008 & ISO 13485:2012

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**Tender Enquiry No. F.No.24/Eqpt/35/2013-RIS (Admin)**

**SPECIFICATION Item Srl No. 35(15)**  
**Platelet agitator cum incubator**

<b>1.</b>	<b>Purpose of Equipment</b> (i) To continuously agitate platelet concentrate in an even suspension in a temperature controlled environment +22 °C ±2 °C in standard platelet bags (random unit or apheresis). (ii) Must be designed specifically for blood bank use. Commercial or modified commercial incubators for other purpose are not acceptable.
<b>2.</b>	<b>Type of Equipment</b> Flatbed agitator fitted inside a temperature controlled incubator that uses CFC-free refrigerant and CFC free insulation material.
<b>3.</b>	<b>Quality Standard</b> (i) Manufacturing should be compliant with ISO 13485, and both manufacturer and distributor/service provider should be ISO 9001:2008 compliant. (ii) Should be compliant with CE Class IIA or US FDA. (iii) Equipment must meet electrical safety specifications of IEC 61010-1
<b>4.</b>	<b>Capacity:</b> At least 96 standard random platelet unit bags.
<b>5.</b>	<b>Construction</b> (i) Outside Corrosion Resistant sheet preferably coated with bacteria resistant material (ii) Inside stainless steel. (iii) Insulation foaming agent CFC free
<b>6.</b>	<b>Drawers and agitator</b> (i) Nonslip corrosion resistant drawers coated with bacteria resistant material (ii) Drawers perforated to ensure good air circulation (iii) The agitator holding the shelves is suspended in such a way as to ensure minimum noise for the life of the agitator. (iv) Gentle side to side agitation at 1.5 inch (3.6–4 cm) and 60–70 strokes/min. (v) Heavy duty ball bearing gear motor for noiseless and continuous operation for 24 hours a day 365 days a year (vi) Auto-pause of agitator on opening door (vii) Push button switch to pause agitator
<b>7.</b>	<b>Door</b> (i) Glass door with full visibility of units without opening door (ii) Door lock should be available
<b>8.</b>	<b>Electrical characteristics</b> (i) Compatible with Input 240V 50 Hz Single phase AC (ii) Should have an integrated voltage stabilizer or external stabilizer of appropriate ratings meeting ISI Specifications (Input 160-260 V and output 220-240 V and 50 Hz).
<b>9.</b>	<b>Internal Temperature</b> (i) Blood Bank Refrigerator should have inside temperature range of 20°C - 24°C (ii) Whatever the load, setting accuracy less than or equal to 0.5°C (preferably 0.1°C). (iii) Should ensure frost free performance thereby avoiding either freezing or heating. If defrosting function used, temperature should not go outside

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	range specified above.
<b>10.</b>	<b>Temperature monitoring, thermograph and related alarms</b> (i) At least 1 temperature sensor. (ii) Digital temperature (LED) display with 0.1 °C graduation. (iii) Integrated Visual and Audible alarm systems for temperature, motion failure, sensor failure, agitator off, power failure (iv) Provision to be connected to a remote monitoring system and remote alarm. (v) The temperature record should be electronically logged (that can be retrieved eg by USB port) and also documented on a physical thermograph; preferably with a 7-day, graphic chart recorder with supply of free charts for full period of warranty. (vi) Must have Battery back up for temperature recordings, which is especially needed during power failure/fluctuations. (vii) Additional Battery back up for alarm so that alarm will not fail in case of power failure, and should be able to sustain the alarm.
<b>11.</b>	<b>Air circulation:</b> The temperature inside should be kept uniform in all shelves by Forced air circulation through fans.

Additional requirements:

- a. All equipment should specify qualifications for design, installation, operation and performance.
- b. Validation and calibration reports should have traceability to applicable national and international standards
- c. Complete with comprehensive set of spare parts and a suitable capacity voltage stabilizer for the equipment should be supplied with the system.
- d. Warranty for 3 years and CMC for Seven years with spare parts availability.
- e. The make, rating, model, description, specifications of each item should be furnished separately.
- f. Necessary catalogues, technical write up in English, should be attached with the offer both in hard and electronic copies.
- g. Should provide list of installations and feedback report. Performance, efficiency, other factors as applicable should be furnished.
- h. Should provide electronic and hard copies of User Manual (English), Service manual (English) and Complete construction details with respect to material specification, thickness, finish etc.
- i. Should provide a set of equipments for calibration (eg thermometer) and routine Preventive Maintenance as per manufacturer documentation in service/technical manual. Free of cost annual calibration in the warranty period.
- j. Should provide Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out.

**Tender Enquiry No. F.No.24/Eqpt/35/2013-RIS (Admin)****SPECIFICATION Item Srl No. 35(16)****Reagent refrigerator**

1.	Should operate at 4 degree C with +/-1 degree C temperature uniformity
2.	Should be CE certified
3.	Should comply IEC safety standards , ISO 9001:2008 & ISO 1385:2012 standards
4.	Should have glass/metal door construction
5.	Should have an interior of 1 mm Stainless Steel sheet and exterior that is constructed of 1mm MS sheet, Powder coated.
6.	Should have a minimum non-CFC PUF insulation
7.	Should include casters as a standard feature
8.	Should have an interior fluorescent light with control panel mounted switch as a standard feature
9.	Should have a light bulb that can be changed without removing the drawers
10.	Should have refrigeration system "On" indicator provided as a standard feature
11.	Independent Alarm system
12.	Should have audible and visual high and low temperature alarms as a standard feature
13.	Should have a digital RTD probe located in the top portion of the chamber in a liquid medium bottle.
14.	Capacity at least 300 litres.
15.	Must incorporate a heavy duty, air cooled refrigeration system designed to operate on 230 volt, 50/60 Hz
16.	Must utilize non-CFC, commercially available refrigerant
17.	Must have an internal evaporator fan that shuts off when the door is opened
18.	Must have a compressor that can maintain required chamber temperatures when operating between 200-240 volts and 50 Hz
19.	Must keep the refrigerator free of frost without elevating the chamber temperature
20.	Must have fully extendable drawer slides
21.	Must have a external cabinet with a clear powder coated finish to guard against rust and corrosion
22.	External transformers are not acceptable
23.	List of installation and feedback report
24.	Should have an integrated voltage stabilizer or external stabilizer of appropriate ratings meeting ISI Specifications (Input 160-260 V and output 220-240 V and 50 Hz).
25.	At least 2 year warranty period with 5 years CMC after expiry of warranty period. Free of cost annual calibration in the warranty period.

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**Tender Enquiry No. F.No.24/Eqpt/35/2013-RIS (Admin)****SPECIFICATION Item Srl No. 35(17)****Refrigerated centrifuge**

1.	For separation of components from whole blood.
2.	Microprocessor controlled
3.	Programmable memory: memory with temper proof facility.
4.	Stainless steel chamber: easy to clean, corrosion resistant with provision of both drain and condensed water collection container.
5.	CFC free refrigerant.
6.	Swinging bucket rotor: with metal buckets, 6X2000ml, wind-shielded. Suitable adapters for 12 blood bags of 350 ml and 450ml.
7.	Removable plastic cups to hold single/ double/ triple/ quadruple blood bags with partition in every bucket.
8.	Insert with hook adapter to spin buffy coat or small volume of blood and balancing weights for inserts.
9.	Equipped with automatic lid lock.
10.	Centrifugal force: 5000-6000g.
11.	Speed variation: microprocessor controlled rotor speed to within 10 rpm of set value. Acceleration and deceleration profiles shall be available.
12.	Temperature range: -10° C to +40° C.
13.	Microprocessor controlled rotor temperature within 1° C of set temperature regardless of centrifuge speed.
14.	Programmable time: 0-99 minutes with minimum resolution of 1 minute.
15.	Digital display of temperature, speed and time. Minimum no. of 3 digit resolution.
16.	Motor imbalance detection: automatic shut down of centrifuge if rotor load is out of balance with appropriate indicator. Should incorporate alarms for imbalance detection lid interlock, over temperature, rotor over speed.
17.	Power requirement: 220/240 volts, 50 Hz. Single phase AC supply.
18.	The equipment shall be suitable for operation from 0 to 40° C at 90% relative humidity. Electronic circuitry shall be tropicalised for this ambient condition.
19.	Noise level within 60 decibels.
20.	The equipment shall have lockable castors.
21.	Protection of data: in event of power interruption or complete failure, data should remain stored.
22.	Should have a provision for external connectivity.
23.	It shall have a security lock to prevent unintentional switch off and also unauthorized opening of the equipment.
24.	At least 3 year warranty period with 5 years CMC after expiry of warranty period. Free of cost annual calibration in the warranty period.
25.	Automatic line voltage corrector/ voltage stabilizer: (i) A line voltage corrector of appropriate rating (10 KVA or as per the requirement of equipment) should form part of standard configuration. (ii) Copper wound single phase automatic line voltage corrector conforming

	<p>to IS: 9815(PLI)/94 with latest amendments or equivalent international standards fitted with a voltmeter and switch to indicate output/ input voltage.</p> <p>(iii) Input voltage: 140-280 V,50 Hz, output voltage: 220 V <math>\pm</math>10%.</p> <p>(iv) Input output voltmeter and amperemeter. Protection for high low voltage cut off, overload and short circuit protection.</p> <p>(v) Equipment should be supplied with 2 meter cord at input and fitted with plugs of appropriate rating.</p> <p>(vi) Make of the line voltage corrector shall be indicated.</p>
26.	<p>Certifications:</p> <p>(i) Product certification: CE Class II A or US FDA certified.</p> <p>(ii) Quality certification: ISO certified.</p> <p>(iii) Electrical safety: Equipment meets electrical safety specifications such as that of IEC (Class I)</p>

**Tender Enquiry No. F.No.24/Eqpt/35/2013-RIS (Admin)****SPECIFICATION Item Srl No. 35(18)****Sterile connecting device**

1.	The devices produce sterile welds between two pieces of compatible tubing. This procedure permits sterile connection of a variety of blood bags.
2.	Should be capable of docking Wet-Wet/Wet-Dry/Dry-Dry tubes with an external diameter from 3.9 - 4.5mm & internal diameter of 2.9 - 3.1mm
3.	Should be capable of docking tubes with all types of blood bags
4.	Total Process time should be between 20 to 30 seconds.
5.	LED Indicators to display the whole process with alarms.
6.	It should be capable of generating a temperature of upto 320°C to prevent any type of contamination.
7.	Power Supply: AC 100V to 240V $\pm$ 10%, 50/60 Hz
8.	Should be CE Mark
9.	List of Installation and Customer satisfaction letter may be attached
10.	Cost of the consumables if any, to be quoted and should be readily available with the vendor.
11.	Atleast 2 year warranty period with 5 years CMC after expiry of warranty period
12.	Company should have service centres in major parts of India.

**Tender Enquiry No. F.No.24/Eqpt/35/2013-RIS (Admin)****SPECIFICATION Item Srl No. 35(19)****Table top centrifuge with swinging bucket rotor**

1.	Speed -100-5,000 rpm
2.	Max Rcf :5,030 x g
3.	Timer :1-99min
4.	Display Rotor: Selection, RPM/RCF, Time
5.	Noise at Max Speed:≤75dB
6.	Power:220V, 50Hz
7.	Motor :Brushless
8.	Max capacity: Set of 4 rotor insert, each insert fits up to 20 tubes of 7ml.
9.	Functions :RCF-preselection, Quick-run, automatic rotor recognition and imbalance detection
10.	Safety : Lid lock and lid interlock (automatic lid locks).
11.	Warranty : Atleast 2 year warranty period with 5 years CMC after expiry of warranty period. Free of cost annual calibration in the warranty period.
12.	Quality <b>certification</b> : Should have ISO9001:2008 and ISO13485:2003 quality <b>certification</b>
12.	Technical literature: The firm shall submit printed illustrated technical literature/ leaflet indicating the model number. Should provide list of installations and feedback report. Performance, efficiency, other factors as applicable should be furnished.

**Tender Enquiry No. F.No.24/Eqpt/35/2013-RIS (Admin)****SPECIFICATION Item Srl No. 35(20)****Dielectric Tube Sealer, Handheld**

1.	<b>Purpose of Equipment:</b> Handheld Blood Bag Tube Sealer is a compact handheld equipment to seal the Blood Bag pilot PVC tubing by transient radio frequency heating and sealing, with no hemolysis.
2.	<b>Quality Standard:</b> (i) Manufacturing should be compliant with ISO 13485, and both manufacturer and distributor/service provider should be ISO 9001:2008 compliant. (ii) Should be compliant with CE Class IIA or US FDA. (iii) Equipment must meet electrical safety specifications of IEC 60601.
3.	Should gently seal tubing with no hemolysis, using radiofrequency heating.
4.	Should be capable of making wide seal of at least 2 mm width.
5.	Should be rechargeable battery operated compact (less than 3 Kg) hand held type, not bench top type.
6.	Sealing time should not be >2 sec
7.	Electrodes should be well protected by a cover to prevent blood splutter.
8.	Should have indicator lamp for sealing process
9.	No warm up time should be required
10.	Should have tear-seal feature to make segments that can be easily separated by hand
11.	No. of seals per charge should be more than 1200 continuous seals from a fully charged battery.
12.	Charger should be compatible with Input voltage: 240V 50 Hz Single phase AC.

**Additional requirements**

- a. All equipment should specify qualifications for design, installation, operation and performance.
- b. Validation and calibration reports should have traceability to applicable national and international standards.
- c. Complete with comprehensive set of spare parts and surge protector with the charging set.
- d. Warranty for 3 years and CMC for Seven years with spare parts availability.
- e. The make, rating, model, description, specifications should be furnished separately.
- f. Necessary catalogues, technical write up in English, should be attached with the offer both in hard and electronic copies.
- g. Should provide list of installations and feedback report. Performance, efficiency, other factors as applicable should be furnished.
- h. Should provide electronic and hard copies of User Manual (English), Service manual (English) and Complete construction details with respect to material specification, thickness, finish etc.
- i. Should provide a set of equipments for calibration and routine Preventive Maintenance as per manufacturer documentation in service/technical manual.
- j. Should provide Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out.

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**Tender Enquiry No. F.No.24/Eqpt/35/2013-RIS (Admin)****SPECIFICATION Item Srl No. 35(21)****Tube sealer (Table top)**

1.	Should have Heavy duty radio frequency sealer
2.	Should have Automatic detection of the tube by pressing of a lever which activates sensor
3.	The sealing time should not be more than 2 seconds.
4.	No warm up time for the equipment before sealing
5.	Should ensure easy separation of tube segments after the sealing.
6.	Should have separable rupture line to separate tube ends after sealing
7.	Switch mode power supply of uniform sealing irrespective of power supply variations
8.	Compatible with the tubes of various manufacturers of blood bag. Should seals 3.0 to 6 mm tubes with wall thickness of 0.75 mm
9.	RF signal should have applied only after the tube is fully squeezed
10.	Indications for ready seal and power
11.	Protection against electric shock
12.	To be operational on 220 to 240 Volt at 50 Hz single phase
13.	Easy to clean electrodes, easily accessible & protected by cover
14.	Indication for sealing progress
15.	Should have CE, C tick marking and must be ISO 9001 compliant

**Additional requirements**

- a. All equipment should specify qualifications for design, installation, operation and performance.
- b. Validation and calibration reports should have traceability to applicable national and international standards.
- c. Complete with comprehensive set of spare parts.
- d. Warranty for 3 years and CMC for Seven years with spare parts availability.
- e. The make, rating, model, description, specifications should be furnished separately.
- f. Necessary catalogues, technical write up in English, should be attached with the offer both in hard and electronic copies.
- g. Should provide list of installations and feedback report. Performance, efficiency, other factors as applicable should be furnished.
- h. Should provide electronic and hard copies of User Manual (English), Service manual (English) and Complete construction details with respect to material specification, thickness, finish etc.
- i. Should provide a set of equipments for calibration and routine Preventive Maintenance as per manufacturer documentation in service/technical manual.
- j. Should provide Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out.

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**Tender Enquiry No. F.No.24/Eqpt/35/2013-RIS (Admin)****SPECIFICATION Item Srl No. 35(22)****Refrigerated transportation box**

1	Should have storage capacity up to 50 – 60 Blood Bags.
2	Should be made of rust proof material both inside and outside, sturdy and easy to clean.
3	Door/lid should be hinged, fully insulated and should guarantee a perfect seal.
4	Should have built in lock and key facility.
5	Should have Rechargeable battery with power back up of at least 4 to 6 hours and should be chargeable by Mains/Car battery.
6	Insulation: PUF insulation, CFC free. Should be of high thickness value and the refrigerator should maintain the internal temperature for 4 hrs without power.
7	Temperature Display: External display of set temperature and provision for external adjustment of internal temperature. Adjustable thermostat should be present to set for different temperatures.
8	Should have Audio-visual alarm: Door open/power failure/low battery and temperature variation.
9	Should have Temperature range: -20°C to +10°C
10	Should have forced air cooling of interior chamber for maximum uniformity of internal temperature.
11	Should have built- in condensate evaporate
12	For easy handling there should be handles and there should either be inbuilt wheels or an attachable trolley.
13	Should have hermetically sealed compressor
14	Both manufacturer and distributor/service provider should be ISO 9001:2008 compliant. Should be compliant with CE or US FDA for this specific purpose.
15	Power requirement: 220-230 V single phase ,50 Hz
16	Should have Warranty for 2 Years. Post warranty CMC is required for 5 years. Free of cost annual calibration in the warranty period.

**Tender Enquiry No. F.No.24/Eqpt/35/2013-RIS (Admin)****SPECIFICATION Item Srl No. 35(23)****Recovery bed**

1.	Semi fowler bed
2.	2 or 3 Section Mattress (HDP – 40 density, 100 mm thick foam covered with cloth backed Rexene of superior quality).
3.	Frame work constructed with precise round Mild steel material
4.	Finish: Pre - treated & Epoxy Powder Coated
5.	Back rest raised by crank system, located at the end of leg section, crank is folding in nature.
6.	ABS head and foot boards, with Indian Rubbished castors, two with brake, without IV Bottle rod

**Tender Enquiry No. F.No.24/Eqpt/35/2013-RIS (Admin)****SPECIFICATION Item Srl No. 35(24)****Instrument trolley**

1.	Frame work should be constructed with stainless steel tubes.
2.	It should have Two Stainless Steel shelves, Stainless Steel rails to cover three sides of top shelf & four of bottom
3.	It should have Stainless Steel tubular frame mounted on four swivel castor, with two breaking
4.	Approximate dimensions: Height: 90-100cm Width: 40-50 cm Length: 50-75 cm

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**Tender Enquiry No. F.No.24/Eqpt/35/2013-RIS (Admin)****SPECIFICATION Item Srl No. 35(25)****Tube Stripper**

1.	Completely pure High Grade stainless steel body.
2.	Swift and complete stripping
3.	Spring loaded design.
4.	Easy handling.
5.	At least two years warranty period.
6.	ISO 9001:2008 certified.

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**Tender Enquiry No. F.No.24/Eqpt/35/2013-RIS (Admin)****SPECIFICATION Item Srl No. 35(26)****Single channel Micropipette**

1.	Variable volume single channel micropipette with non-slip ergonomic design
2.	Fully autoclavable, without need for post-autoclaving recalibration
3.	Single tip-ejector
4.	Two-step plunger operation
5.	Designed to access into narrow necked glassware
6.	Tip cone with excellent chemical resistance
7.	Low activation force for blow-out and tip ejection
8.	Easy calibration, cleaning and maintenance;
9.	To be supplied with full documentation of precision & accuracy certificate through ISO 8655 certified QC assurance for gravimetry.
10.	At least 2 year warranty period with 5 years CMC after expiry of warranty period. Free of cost annual calibration in the warranty period.
11.	Should be ISO 9001:2008 certified.
12.	Essential Accessories must be supplied with the main consignment & committed in the bid: 1. One pipette stand for 5 pipettes. 2. Standard tools and lubricants. 3. Pack of sterile microtip for pipette (10x96 )

**Tender Enquiry No. F.No.24/Eqpt/35/2013-RIS (Admin)****SPECIFICATION Item Srl No. 35(27)****Apheresis machine**

1.	General description: The Apheresis Machine should have facility for all blood component collection including peripheral blood stem cells, plateletpheresis & also therapeutic plasmapheresis, red cell pheresis.
2.	It should be based on continuous flow technology minimize procedure time & increase the efficiency.
3.	Equipments should ensure all donor safety parameters before starting the procedure and at all time during operation.
4.	Capable of priming with normal Saline and or mixture of Normal Saline and ACD
5.	In – built cuff pressure and prompt grip for donor comfort and adequate blood flow.
6.	It should have auto cuff mechanism for automatic inflation & deflation.
7.	Facility to use platelets additive solution and / or normal Saline for re-suspension and storage fluid in place of plasma
8.	Advance help menu should be available at any time during alarm conditions
9.	Lower extra corporeal volume, less than 200 ml
10.	Yield estimator to help decide yield, volume to be processed and suggested storage fluid and should have optical sensor at PRP line for online monitoring of component collection against the desired yield.
11.	Capable of downloading or printing full procedure report any time after procedure.
12.	Capable to connect bar code reader/ HIS if desired.
13.	Should have rechargeable battery to store data and restart in case of power failure.
14.	Continuous monitoring of collection to avoid any contamination through Interface detector.
15.	Inlet and return flow rates could be regulated.
16.	Should have fluid leak detector for donor safety
17.	In case of inlet line occlusion, machine should be able to re-start automatically
18.	Should have provision for saline re-infusion to donor.
19.	Should be able to regulate ACD delivery, should not have bolus return of blood to ensure reduce citrate reactions.
20.	Should have automatic door lock for centrifuge during the procedure.
21.	Lockable castors/ wheels for mobility
22.	System Configuration Accessories, spares and consumables: 1. 20 disposable kits should be provided with equipment 2. Consumables should be available for at least 10 years after the sale of machine. 3. All consumables required for installation and standardization of system to be given free of cost. 4. The final cost of the machine will include a) Original cost of the machine, b) CMC, c) Cost of consumables for evaluation.
23.	Environmental factors: The unit shall be capable of operating continuously in ambient temperature of 10 - 40° C and relative humidity of 15-90%
24.	Power input: 220-240VAC, 50Hz fitted with Indian plug
25.	Suitable Servo controlled Stabilizer/CVT Suitable UPS with maintenance free batteries for minimum one-hour back-up should be supplied with the system.
26.	Standards and Safety 1. Should be FDA or CE approved product. DCGI approval is mandatory 2. Comprehensive warranty for 5 years. CMC after warranty 3. Electrical safety conforms to standards for electrical safety IEC-60601 / IS-13450 4. Manufacturer should be ISO certified for quality standards. 5. Comprehensive training for lab staff and support services till familiarity with the system.

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**Tender Enquiry No. F.No.24/Eqpt/35/2013-RIS (Admin)****SPECIFICATION Item Srl No. 35(28)****Chemiluminescence based fully automated immunoassay**

1.	Fully Automated immunodiagnostic system, shall be based on enhanced chemiluminescence technology, walkaway, high throughput system for HIV I & II, HbsAg, HCV and preferably Syphilis with latest acceptable Technology and reagents should be acceptable by DGCI.
2.	<b>Capacity</b> (i) It should have continuous loading capacity of 50 samples. (ii) It should have barcode reader to read multiple barcode types. (iii) It should have a capability to do the assay in continuous, random, batch & stat mode.
3.	<b>Sample Handling</b> (i) It should have the capacity to accept various types of sample container like primary, secondary tubes and micro sample cups for sampling purposes. (ii) It should have access to the samples during operations. (iii) It should have the facility for clot detection, bubble detection, check viscosity, sample level and short samples to ensure accuracy preventing erroneous results due to improper samples. (iv) It should have an ability to do on board dilution and reflex dilution for high and abnormal samples. (v) It should have the disposable tip sampling system to overcome the carryover and or cross contamination probability.
	<b>Reagent Management</b> (i) It should have the disposable tips system to avoid reagent carryover. (ii) The onboard reagent stability should be minimum 2 months. (iii) It should be continuous random access to loading and unloading reagents. (iv) It should have the compact, integrated reagent pack with all components. (v) It should have the inbuilt refrigeration system with 2 to 8 deg C stability of the reagents on board. (vi) It should have the capability of inbuilt inventory management system by tracking all the reagents and supplies automatically.
5.	<b>Calibration and Quality Control</b> (i) It should have the calibration stability of at least 25-30 days for each parameter to decrease reagents consumption. (ii) It shall have multiple lot calibration capabilities and calibration curve transition facility. (iii) It shall have the QC package system to monitor the quality of result obtained.
6.	<b>Data Management</b> (i) It should have the self diagnosis and error recovery system with onboard operator guides for efficient trouble shooting purpose. (ii) It shall be compatible to the laboratory information system for on data storage facility for a min. of 5000 reports. (iii) It shall have online status for worksheet, samples, reagents, tips, quality controls.
7.	<b>Waste Management:</b> It shall have the facility to collect both liquid and solid waste.
8.	It should have onsite warranty of two years after installation.
9.	Rates for CMC to be quoted separately after completion of warrantee for 5 years and these rates will be taken into account of pricing.
10.	Free onsite training to Doctors and Technicians to be provided.
11.	Company should provide 1000 test reagent for HIV, HbsAg, HCV each free of cost.
12.	For close system quotation for various type of consumables and accessories.
13.	Equipment should be complete to start for day one.
14.	Acceptable quality certification. List of installations and feedback report should be provided.

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**Tender Enquiry No. F.No.24/Eqpt/35/2013-RIS (Admin)**

**MANUFACTURER's / PRINCIPAL's AUTHORIZATION FORM**

(Clause 12 (C) of the tender)

To

The Administrative Officer,  
All India Institute of Medical Sciences  
Rishikesh

Dear Sir,

TENDER: \_\_\_\_\_.  
we, \_\_\_\_\_, who are established and reputable  
manufacturers of \_\_\_\_\_, having factories at \_\_\_\_\_  
and \_\_\_\_\_, hereby authorize Messrs. \_\_\_\_\_ (*name  
and address of agents*) to bid, negotiate and conclude the contract with you against Tender  
No. \_\_\_\_\_ for the above goods manufactured by us. No company or firm or  
individual other than Messrs. \_\_\_\_\_ are authorized to bid, negotiate  
and conclude the contract in regard to this business against this specific tender.

We hereby extend our full guarantee and warranty as per the conditions of tender for the  
goods offered for supply against this tender by the above firm.

The authorization is valid up to \_\_\_\_\_

Yours faithfully,

(Name)

For and on behalf of Messrs. \_\_\_\_\_  
(*Name of manufacturers*)/Principal.

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